From: Jay Smith

To: victor.a.schneider@cummins.com

Cc: joseph.sawin@cummins.com; Justin Greuel; rich.s.wagner@cummins.com; timothy.shipp@cummins.com

Subject: Re: Dodge Ram 6.7L Applications

Date: 12/05/2012 09:58 AM

Hello Victor,

Please keep us posted as this progresses.

I received the CARB approval for the 313Q family. Do you expect approval for the 313S in the immediate future?

Sincerely,

Jay Smith

James D. Smith, Ph.D.
Mechanical Engineer
Compliance Division
Office of Transportation & Air Quality
US Environmental Protection Agency
2000 Traverwood Dr.
Ann Arbor, MI 48105

Office Phone: 734-214-4302

▼ victor.a.schneider---12/04/2012 10:13:05 AM---Jay, we are not able to introduce this for the first production of 2013 engines. However, we will

From: victor.a.schneider@cummins.com
To: Jay Smith/AA/USEPA/US@EPA

Cc: Justin Greuel/DC/USEPA/US@EPA, joseph.sawin@cummins.com, Gregory Orehowsky/DC/USEPA/US@EPA, rich.s.wagner@cummins.com,

timothy.shipp@cummins.com Date: 12/04/2012 10:13 AM

Subject: Re: Dodge Ram 6.7L Applications

Jay, we are not able to introduce this for the first production of 2013 engines. However, we will look into what it takes to implement it as a running change during the year.

From: Smith.Jay@epamail.epa.gov
To: victor.a.schneider@cummins.com

Cc: joseph.sawin@cummins.com, rich.s.wagner@cummins.com, Orehowsky.Gregory@epamail.epa.gov, Greuel.Justin@epamail.epa.gov

Date: 11/30/2012 01:19 PM

Subject: Re: Dodge Ram 6.7L Applications

Hello Victor,

I've spoken with Greg and Justin about this and, while the EVIC message is fine as an intermediate inducement, we still don't see why the search for final inducement would not be triggered at CBI/ Ex. 4 Our guidance outlines our expectation that the search for final inducement would begin within CBI/ Ex. 4 of a fault detection and by your own average speed projection, this would be CBI/ Ex. 4 If the timing for this change cannot support the start of 2013 production we would be willing to have this implemented at some point in the 2013 model year as a running change.

Jay Smith

James D. Smith, Ph.D.
Mechanical Engineer
Compliance Division
Office of Transportation & Air Quality
US Environmental Protection Agency
2000 Traverwood Dr.
Ann Arbor, MI 48105

Office Phone: 734-214-4302

From: victor.a.schneider@cummins.com
To: Jay Smith/AA/USEPA/US@EPA

Cc: joseph.sawin@cummins.com, rich.s.wagner@cummins.com

Date: 11/27/2012 04:15 PM

Subject: Re: Dodge Ram 6.7L Applications

Jay -

CBI/Ex. 4

CBI/Ex. 4

From: Smith.Jay@epamail.epa.gov
To: victor.a.schneider@cummins.com
Cc: joseph.sawin@cummins.com
Date: 11/27/2012 01:43 PM

Subject: Re: Dodge Ram 6.7L Applications

With regard to the discussion on SCR-related inducements below, I do have some concerns that this strategy is not as stringent as the primary competitors in this segment and does not meet our guidance. First, it

CBI/Ex. 4

I've asked Greg to provide some history on why this was originally approved but in the mean time, I'd like you to take this under consideration.

Sincerely,

Jay Smith

James D. Smith, Ph.D.
Mechanical Engineer
Compliance Division
Office of Transportation & Air Quality
US Environmental Protection Agency
2000 Traverwood Dr.
Ann Arbor, MI 48105

Office Phone: 734-214-4302

From: victor.a.schneider@cummins.com
To: Jay Smith/AA/USEPA/US@EPA
Cc: joseph.sawin@cummins.com

Date: 11/19/2012 04:43 PM

Subject: Re: Dodge Ram 6.7L Applications

Answers in red below.

From: Smith.Jay@epamail.epa.gov
To: victor.a.schneider@cummins.com

Date: 11/14/2012 03:53 PM

Subject: Dodge Ram 6.7L Applications

Hello Victor,

I've completed my review of the two Dodge Ram 6.7L applications. Here are some things we'll need to address:

- -I do not have a statement of compliance for the 313Q family. Statements of compliance for both 313Q and 313S are being supplied to you.
- -Can you supply a copy of the materials that are furnished to the end user explaining how to properly maintain the emission control system and how to obtain/refill the DEF tank? I'm getting you the owners manual.
- -Why is operator commanded regeneration not an option with these families (AECD 10-6 on other CMI applications)? In our experience, this functionality is almost a necessity for applications typical of those that this product will be used in (ambulances, construction vehicles, etc), where normal operation will not produce the conditions necessary for regeneration.

Chrysler specified a manual regen to be a service event only. This has been in place since 2007 and we are not aware of any issues.

CBI/ Ex. 4

CBI/Ex. 4

CBI/Ex. 4

CBI/ Ex. 4

-For the DEF quality monitor, near the bottom of slide 468 there is a range of SET NOx emissions. Does this represent the emission level at which you would be able to make the determination that a DEF quality fault exists? If not, what does this mean?

This is the emissions increase that would be seen seen when a DEF quality fault is dectected.

-Just out of curiosity, are there any Dodge-Cummins products for 2013 that do not use [CBU Ex. 4] I believe there was still a chassis-certified ISB with an [CBU Ex. 4] n 2012, if I'm not mistaken.

All of the 2013 Dodge-Cummins engines in 2013 will use including the chassis certified vehicles.

Once these questions are addressed, we'll only be waiting on OBD approval.

Sincerely.

Jay Smith

James D. Smith, Ph.D.
Mechanical Engineer
Compliance Division
Office of Transportation & Air Quality
US Environmental Protection Agency
2000 Traverwood Dr.
Ann Arbor, MI 48105

Office Phone: 734-214-4302